

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P400507

Luminaire Tested: **ARCH-L-PA3-90-740-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400507  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-90-740-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15645 lumens  
Efficiency: N/A  
Efficacy: 168.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G3

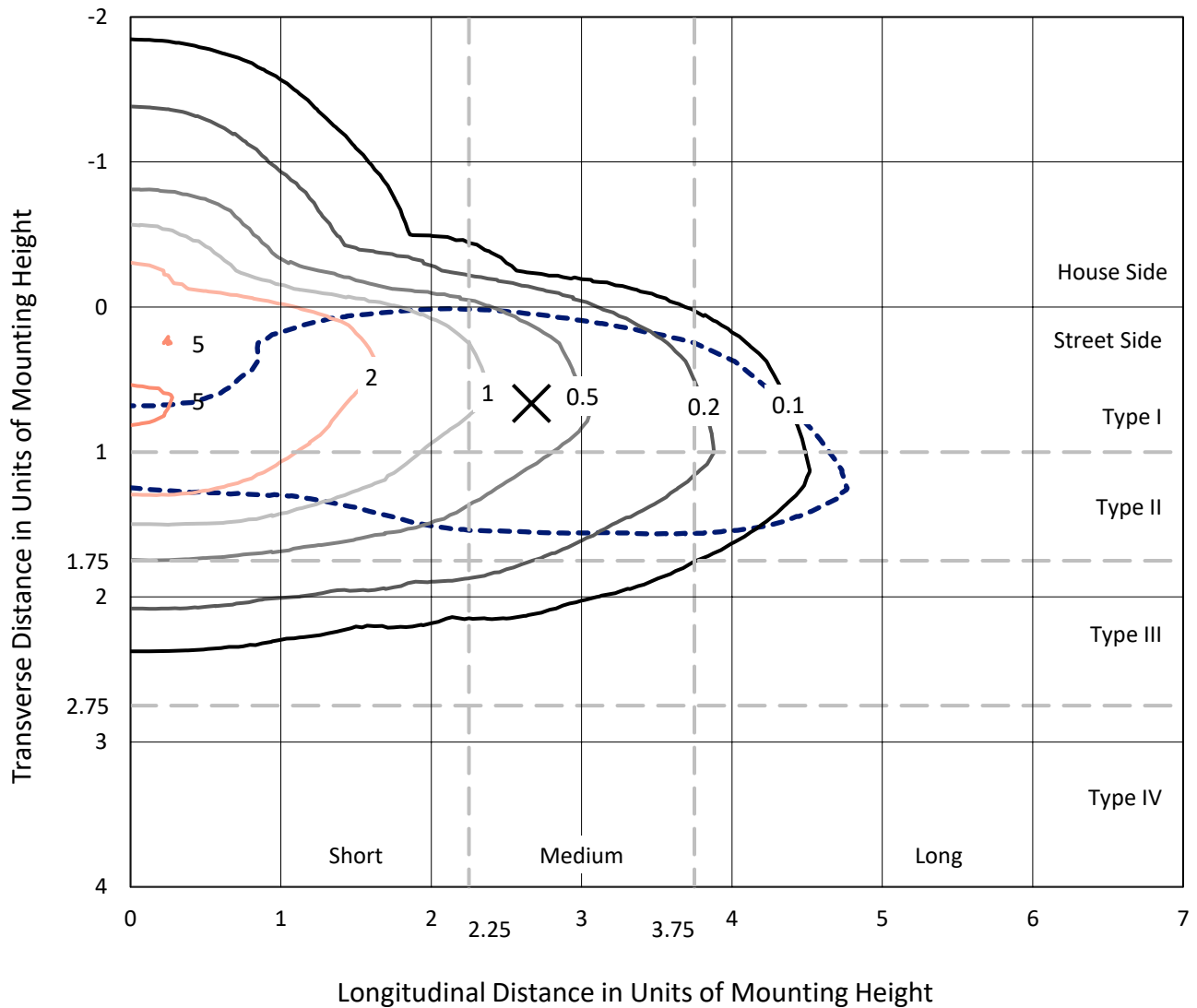
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

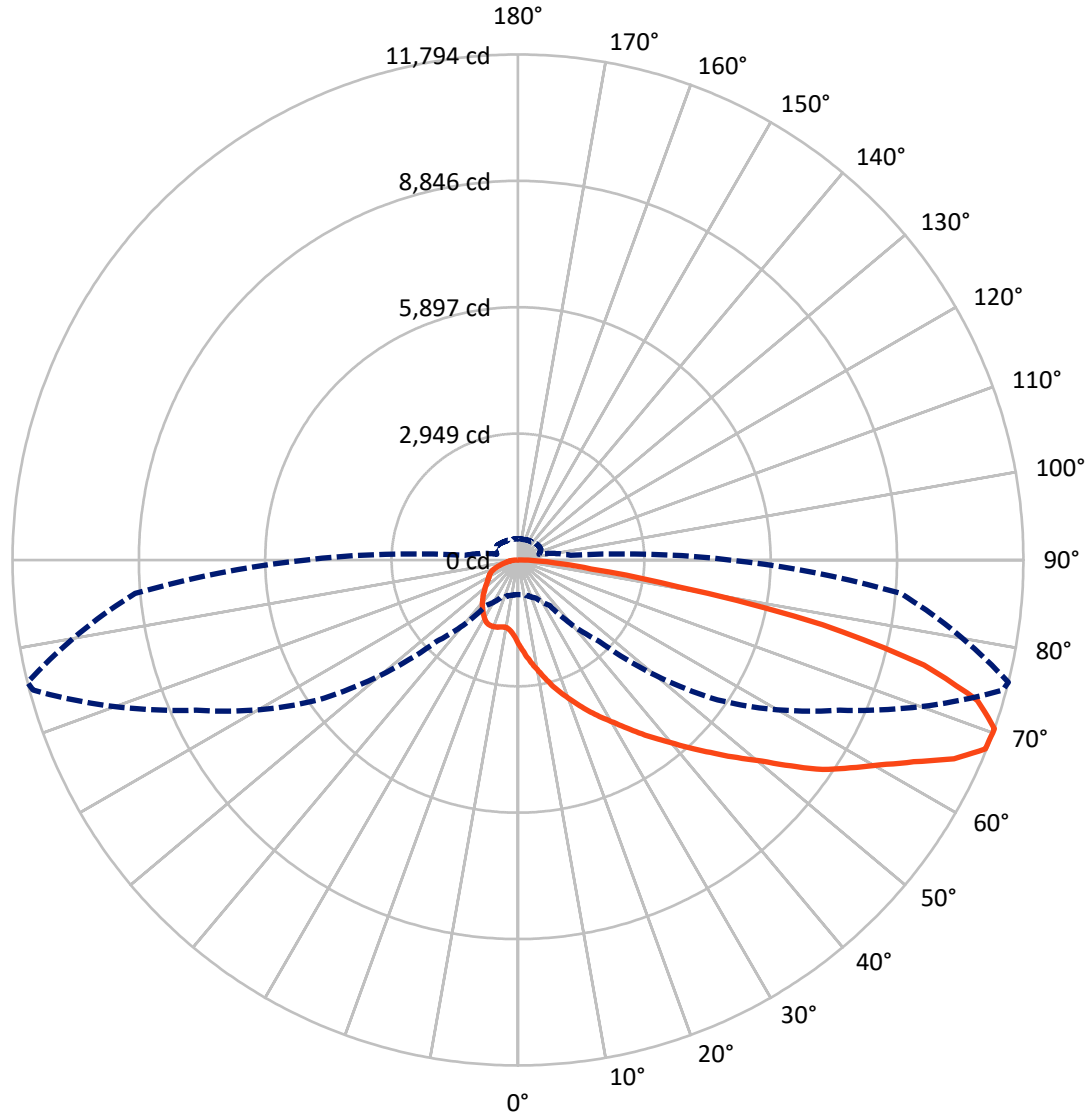
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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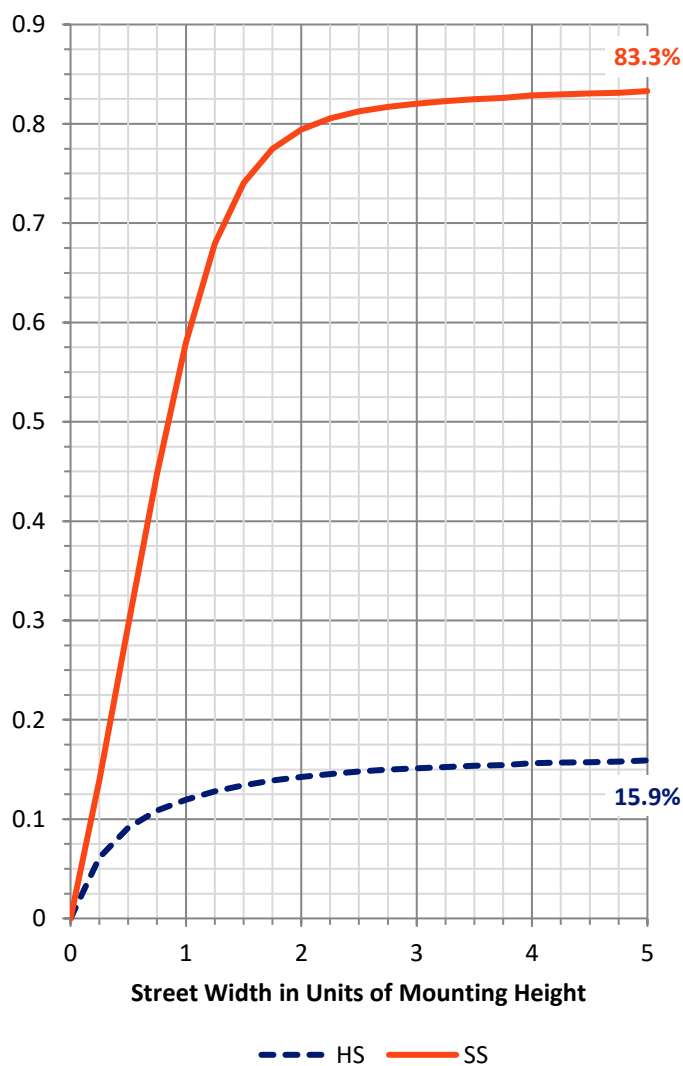
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2554.2   | 0.0    | 2554.2  |
|                    | % Fixture | 16.3     | 0.0    | 16.3    |
| <b>Street Side</b> | Lumens    | 13090.8  | 0.0    | 13090.8 |
|                    | % Fixture | 83.7     | 0.0    | 83.7    |
| <b>Total</b>       | Lumens    | 15645.0  | 0.0    | 15645.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 203.3   | 1.3       |
| 10°-20°   | 690.9   | 4.4       |
| 20°-30°   | 1236.1  | 7.9       |
| 30°-40°   | 1999.6  | 12.8      |
| 40°-50°   | 2892.7  | 18.5      |
| 50°-60°   | 3310.9  | 21.2      |
| 60°-70°   | 3045.7  | 19.5      |
| 70°-80°   | 1883.4  | 12.0      |
| 80°-90°   | 382.5   | 2.4       |
| 90°-100°  | 0.0     | 0.0       |
| 100°-110° | 0.0     | 0.0       |
| 110°-120° | 0.0     | 0.0       |
| 120°-130° | 0.0     | 0.0       |
| 130°-140° | 0.0     | 0.0       |
| 140°-150° | 0.0     | 0.0       |
| 150°-160° | 0.0     | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-90°    | 15645.0 | 100.0     |
| 0°-180°   | 15645.0 | 100.0     |

**Coefficient of Utilization**



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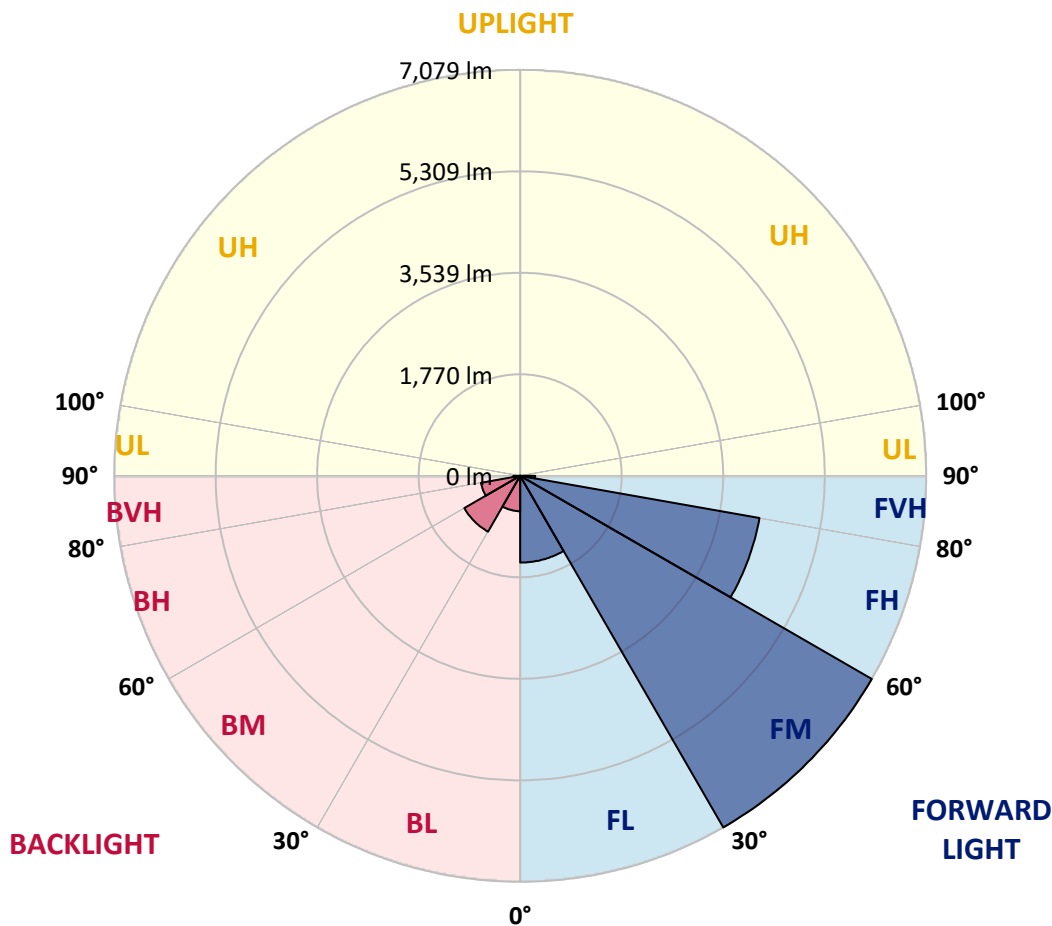
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1513.4 | 9.7       |                         |      |         |
| FM (30°-60°)   | 7078.6 | 45.2      |                         |      |         |
| FH (60°-80°)   | 4236.2 | 27.1      |                         |      | G2/5000 |
| FVH (80°-90°)  | 262.6  | 1.7       |                         |      | G3/500  |
| BL (0°-30°)    | 616.9  | 3.9       | B2/1000                 |      |         |
| BM (30°-60°)   | 1124.6 | 7.2       | B2/2500                 |      |         |
| BH (60°-80°)   | 692.8  | 4.4       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 119.9  | 0.8       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°     | 76°     | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| 0°    | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5  | 1956.5  | 1956.5 |
| 2.5°  | 2493.4 | 2474.9 | 2472.9 | 2444.0 | 2417.3 | 2345.3 | 2293.9 | 2203.3 | 2112.8  | 2110.8  | 2020.2 |
| 5°    | 2882.3 | 2863.7 | 2853.4 | 2818.5 | 2773.2 | 2678.6 | 2586.0 | 2446.1 | 2291.8  | 2281.5  | 2110.8 |
| 7.5°  | 3145.6 | 3129.1 | 3108.6 | 3094.2 | 3050.9 | 2966.6 | 2853.4 | 2686.8 | 2474.9  | 2454.3  | 2215.7 |
| 10°   | 3322.5 | 3312.2 | 3308.1 | 3297.8 | 3271.1 | 3203.2 | 3094.2 | 2917.2 | 2658.0  | 2635.4  | 2326.8 |
| 12.5° | 3398.6 | 3394.5 | 3413.0 | 3441.8 | 3452.1 | 3425.4 | 3320.5 | 3153.8 | 2859.6  | 2834.9  | 2460.5 |
| 15°   | 3310.2 | 3314.3 | 3361.6 | 3460.3 | 3565.3 | 3622.9 | 3561.2 | 3398.6 | 3088.0  | 3053.0  | 2616.9 |
| 17.5° | 3269.0 | 3275.2 | 3308.1 | 3402.7 | 3550.9 | 3729.9 | 3758.7 | 3631.1 | 3308.1  | 3258.7  | 2781.4 |
| 20°   | 3341.0 | 3349.3 | 3373.9 | 3448.0 | 3550.9 | 3742.2 | 3892.4 | 3853.3 | 3524.1  | 3472.7  | 2939.9 |
| 22.5° | 3524.1 | 3534.4 | 3532.4 | 3579.7 | 3649.6 | 3781.3 | 3966.4 | 4063.1 | 3750.4  | 3692.8  | 3104.4 |
| 25°   | 3915.0 | 3906.8 | 3836.8 | 3814.2 | 3832.7 | 3917.1 | 4065.2 | 4264.7 | 3987.0  | 3929.4  | 3277.2 |
| 27.5° | 4445.8 | 4435.5 | 4307.9 | 4192.7 | 4089.9 | 4126.9 | 4205.1 | 4427.3 | 4227.7  | 4161.9  | 3441.8 |
| 30°   | 5013.6 | 5001.2 | 4853.1 | 4665.9 | 4437.6 | 4384.1 | 4373.8 | 4569.2 | 4470.5  | 4400.5  | 3616.7 |
| 32.5° | 5567.0 | 5556.7 | 5398.3 | 5180.2 | 4865.5 | 4705.0 | 4606.3 | 4727.6 | 4746.1  | 4678.3  | 3808.0 |
| 35°   | 6071.0 | 6071.0 | 5935.3 | 5676.0 | 5320.1 | 5077.4 | 4914.8 | 4923.1 | 5063.0  | 4984.8  | 4026.1 |
| 37.5° | 6519.5 | 6517.5 | 6369.3 | 6114.2 | 5772.7 | 5495.0 | 5293.4 | 5159.7 | 5365.4  | 5297.5  | 4254.5 |
| 40°   | 6875.4 | 6861.0 | 6752.0 | 6529.8 | 6186.2 | 5910.6 | 5706.9 | 5437.4 | 5702.8  | 5641.1  | 4497.2 |
| 42.5° | 7134.7 | 7126.4 | 7052.4 | 6859.0 | 6531.9 | 6272.6 | 6132.8 | 5787.1 | 6085.4  | 6023.7  | 4781.1 |
| 45°   | 7235.5 | 7251.9 | 7251.9 | 7068.8 | 6809.6 | 6573.0 | 6511.3 | 6171.8 | 6499.0  | 6437.2  | 5085.6 |
| 47.5° | 7072.9 | 7116.1 | 7204.6 | 7216.9 | 6988.6 | 6828.1 | 6848.7 | 6558.6 | 6924.8  | 6891.9  | 5418.9 |
| 50°   | 6564.8 | 6645.0 | 6838.4 | 7188.1 | 7060.6 | 7023.6 | 7136.7 | 6953.6 | 7381.5  | 7371.2  | 5824.2 |
| 52.5° | 5254.3 | 5449.7 | 6052.5 | 6680.0 | 7011.2 | 7114.1 | 7422.7 | 7398.0 | 7969.9  | 7986.4  | 6352.9 |
| 55°   | 4030.2 | 4104.3 | 4801.7 | 5869.4 | 6708.8 | 7085.3 | 7614.0 | 7832.1 | 8607.7  | 8628.2  | 6838.4 |
| 57.5° | 3258.7 | 3308.1 | 3688.7 | 4801.7 | 6019.6 | 6928.9 | 7764.2 | 8085.1 | 9097.3  | 9150.8  | 7270.4 |
| 60°   | 2581.9 | 2653.9 | 2909.0 | 3674.3 | 5054.7 | 6552.4 | 7869.1 | 8367.0 | 9624.0  | 9704.2  | 7786.8 |
| 62.5° | 1919.4 | 1954.4 | 2195.1 | 2721.8 | 4001.4 | 5875.6 | 7813.6 | 8673.5 | 10269.9 | 10366.6 | 8408.1 |
| 65°   | 1366.0 | 1396.9 | 1567.6 | 1935.9 | 2958.4 | 4960.1 | 7490.6 | 8901.9 | 11080.5 | 11179.3 | 9033.5 |
| 67.5° | 1022.5 | 1034.8 | 1131.5 | 1353.7 | 1993.5 | 3853.3 | 6836.3 | 8862.8 | 11673.0 | 11761.5 | 9284.5 |
| 70°   | 808.5  | 812.6  | 859.9  | 979.3  | 1296.1 | 2682.7 | 5690.4 | 8288.8 | 11716.2 | 11794.4 | 8967.7 |
| 72.5° | 670.7  | 668.6  | 695.4  | 753.0  | 903.1  | 1697.3 | 4215.4 | 7223.1 | 11160.7 | 11214.2 | 8083.1 |
| 75°   | 553.4  | 557.5  | 576.0  | 609.0  | 689.2  | 1119.2 | 2732.1 | 5762.4 | 9846.1  | 9788.5  | 6782.9 |
| 77.5° | 464.9  | 462.9  | 471.1  | 499.9  | 557.5  | 804.4  | 1600.6 | 4163.9 | 7297.2  | 7268.4  | 4452.0 |
| 80°   | 374.4  | 378.5  | 390.9  | 415.6  | 469.1  | 613.1  | 946.3  | 2598.3 | 3915.0  | 3810.1  | 2127.2 |
| 82.5° | 251.0  | 290.1  | 314.8  | 343.6  | 405.3  | 452.6  | 600.7  | 1320.8 | 1750.7  | 1724.0  | 964.9  |
| 85°   | 119.3  | 158.4  | 234.5  | 267.4  | 329.2  | 283.9  | 407.3  | 629.5  | 876.4   | 866.1   | 347.7  |
| 87.5° | 24.7   | 24.7   | 125.5  | 150.2  | 203.7  | 121.4  | 226.3  | 273.6  | 423.8   | 397.1   | 142.0  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5 | 1956.5 |
| 2.5°  | 1966.8 | 1911.2 | 1800.1 | 1711.7 | 1621.1 | 1569.7 | 1505.9 | 1475.1 | 1468.9 | 1452.4 | 1464.8 |
| 5°    | 2001.7 | 1892.7 | 1682.9 | 1545.0 | 1452.4 | 1407.2 | 1384.6 | 1376.3 | 1374.3 | 1370.1 | 1370.1 |
| 7.5°  | 2049.1 | 1882.4 | 1608.8 | 1468.9 | 1409.2 | 1394.8 | 1401.0 | 1413.4 | 1415.4 | 1419.5 | 1417.5 |
| 10°   | 2106.7 | 1884.5 | 1567.6 | 1450.4 | 1421.6 | 1423.6 | 1444.2 | 1460.7 | 1468.9 | 1475.1 | 1473.0 |
| 12.5° | 2186.9 | 1909.2 | 1561.5 | 1462.7 | 1450.4 | 1458.6 | 1479.2 | 1495.6 | 1503.9 | 1505.9 | 1505.9 |
| 15°   | 2291.8 | 1960.6 | 1575.9 | 1489.5 | 1479.2 | 1485.4 | 1497.7 | 1503.9 | 1505.9 | 1503.9 | 1503.9 |
| 17.5° | 2407.0 | 2022.3 | 1596.5 | 1505.9 | 1489.5 | 1483.3 | 1479.2 | 1473.0 | 1460.7 | 1452.4 | 1452.4 |
| 20°   | 2518.1 | 2077.9 | 1606.7 | 1503.9 | 1475.1 | 1450.4 | 1425.7 | 1394.8 | 1374.3 | 1357.8 | 1357.8 |
| 22.5° | 2629.2 | 2129.3 | 1606.7 | 1481.2 | 1436.0 | 1388.7 | 1337.2 | 1287.9 | 1257.0 | 1236.4 | 1236.4 |
| 25°   | 2746.5 | 2178.7 | 1594.4 | 1442.2 | 1374.3 | 1306.4 | 1236.4 | 1174.7 | 1143.8 | 1123.3 | 1119.2 |
| 27.5° | 2845.2 | 2207.5 | 1561.5 | 1386.6 | 1298.1 | 1211.7 | 1131.5 | 1067.7 | 1045.1 | 1026.6 | 1026.6 |
| 30°   | 2950.1 | 2226.0 | 1499.8 | 1314.6 | 1211.7 | 1113.0 | 1030.7 | 979.3  | 954.6  | 927.8  | 925.8  |
| 32.5° | 3067.4 | 2238.3 | 1429.8 | 1238.5 | 1123.3 | 1018.4 | 948.4  | 907.3  | 853.8  | 825.0  | 820.9  |
| 35°   | 3203.2 | 2254.8 | 1355.7 | 1152.1 | 1034.8 | 940.2  | 899.0  | 831.1  | 779.7  | 755.0  | 753.0  |
| 37.5° | 3347.2 | 2267.1 | 1275.5 | 1076.0 | 954.6  | 888.7  | 847.6  | 767.4  | 722.1  | 685.1  | 681.0  |
| 40°   | 3499.4 | 2267.1 | 1193.2 | 1001.9 | 890.8  | 866.1  | 787.9  | 715.9  | 639.8  | 621.3  | 617.2  |
| 42.5° | 3668.1 | 2263.0 | 1110.9 | 929.9  | 831.1  | 814.7  | 753.0  | 676.8  | 637.8  | 621.3  | 617.2  |
| 45°   | 3847.1 | 2248.6 | 1032.8 | 847.6  | 769.4  | 736.5  | 689.2  | 668.6  | 652.2  | 652.2  | 652.2  |
| 47.5° | 4050.8 | 2236.3 | 944.3  | 773.5  | 724.2  | 687.1  | 652.2  | 639.8  | 637.8  | 643.9  | 650.1  |
| 50°   | 4312.1 | 2232.1 | 870.2  | 720.0  | 689.2  | 646.0  | 641.9  | 631.6  | 633.6  | 633.6  | 633.6  |
| 52.5° | 4628.9 | 2195.1 | 800.3  | 681.0  | 654.2  | 602.8  | 615.1  | 625.4  | 629.5  | 627.5  | 625.4  |
| 55°   | 4861.4 | 2129.3 | 740.6  | 654.2  | 629.5  | 586.3  | 602.8  | 619.2  | 623.4  | 617.2  | 617.2  |
| 57.5° | 5071.2 | 2036.7 | 693.3  | 633.6  | 613.1  | 576.0  | 594.6  | 611.0  | 606.9  | 604.8  | 602.8  |
| 60°   | 5311.9 | 1948.2 | 656.3  | 623.4  | 596.6  | 571.9  | 588.4  | 598.7  | 592.5  | 588.4  | 586.3  |
| 62.5° | 5573.2 | 1861.8 | 629.5  | 623.4  | 584.3  | 569.9  | 582.2  | 586.3  | 574.0  | 569.9  | 569.9  |
| 65°   | 5694.6 | 1726.1 | 600.7  | 623.4  | 578.1  | 565.8  | 569.9  | 565.8  | 553.4  | 553.4  | 551.4  |
| 67.5° | 5495.0 | 1501.8 | 563.7  | 615.1  | 586.3  | 559.6  | 551.4  | 545.2  | 530.8  | 530.8  | 526.7  |
| 70°   | 4943.6 | 1234.4 | 510.2  | 588.4  | 588.4  | 557.5  | 526.7  | 512.3  | 495.8  | 502.0  | 493.7  |
| 72.5° | 4223.6 | 979.3  | 444.4  | 543.1  | 576.0  | 555.5  | 499.9  | 477.3  | 462.9  | 469.1  | 456.7  |
| 75°   | 3421.3 | 759.1  | 366.2  | 471.1  | 545.2  | 545.2  | 473.2  | 442.3  | 425.9  | 425.9  | 411.5  |
| 77.5° | 2180.7 | 561.6  | 298.3  | 390.9  | 489.6  | 530.8  | 450.5  | 403.2  | 378.5  | 372.4  | 362.1  |
| 80°   | 1080.1 | 395.0  | 244.8  | 310.6  | 417.6  | 497.9  | 434.1  | 358.0  | 323.0  | 310.6  | 292.1  |
| 82.5° | 574.0  | 273.6  | 195.4  | 242.8  | 333.3  | 448.5  | 413.5  | 308.6  | 265.4  | 246.9  | 226.3  |
| 85°   | 257.2  | 168.7  | 156.4  | 185.2  | 253.0  | 368.3  | 372.4  | 253.0  | 203.7  | 242.8  | 179.0  |
| 87.5° | 94.6   | 76.1   | 76.1   | 94.6   | 146.1  | 154.3  | 263.3  | 162.5  | 129.6  | 88.5   | 69.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)